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10/689,951	10/22/2003	Gregory Hackman	98731-000001/US	4019

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EXAMINER
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ALI, MOHAMMAD M

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3744

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/689,951  
Filing Date: October 22, 2003  
Appellant(s): HACKMAN ET AL.

**MAILED**  
**MAR 14 2006**  
**GROUP 3700**

HACKMAN et al.

For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 01/03/06 appealing from the Office  
action mailed 10/31/05(1) **Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The amendment after final rejection filed on 07/28/05 has not been entered.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

4,420,621	Sillat	12-1994
6,016,697	McCulloch	01-2000
5,142,874	Maric	09-1992

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1 and 6-11, 13-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Sillat, Diethard (DE 4420621 A1). Sillat, Diethard discloses a cryogenic fluid distribution device comprising a fluid flow passage 8/10 for distributing cryogenic fluid 5 to an apparatus/manometer 12, the over flow passage supplying fluid from tank 3 is positioned downstream of the apparatus 12; and a sensor positioned in the manometer 12 (See page 4, lines 5-6 and 15-19 in the enclosed translation) with the overflow passage 10, connected to a controller K through tube 13, pneumatic operating member P3 and connecting line C, the sensor having an active component for determining if fluid is present in the overflow line 10, inlet and outlet line 6 for the reservoir 1, inlet and outlet of a cooled device (inherent because while delivering the cryogen 5 from reservoir to any device should be cooled device and must have inlet and outlet line). See Fig. 1.

Claims 2 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sillat, Diethard in view of McCulloch et al., (6,016,697). Sillat, Diethard discloses the invention substantially as claimed as stated above. However, Sillat, Diethard does not disclose light emitting diode. McCulloch et al., teach the use of a light emitting diode (LED) 274, 276, 278 in a fluid sensing system of a cryogenic storage tank 100 through a controller 200 for the purpose of sensing presence of fluid. See Fig.1, 6 and column 6,

lines 47 to column 8, line 8. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the cryogenic fluid distribution system of Sillat, Diethard in view of McCulloch et al., such that a light emitting diode could be provided in order to act as an active component for determining presence of fluid.

Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sillat, Diethard in view of Maric (5,142,874). Sillat, Diethard discloses the invention substantially as claimed as stated above. However, Sillat, Diethard does not disclose a hole intersecting a through passage. Maric teaches the use a hole containing a sensor 70 intersecting a through passage 24 in a cryogenic apparatus for the purpose of holding a sensor 70 and sensing fluid temperature. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the cryogenic fluid distribution system of Sillat, Diethard in view of McCulloch et al., such that a hole intersecting a fluid passage could be provided in order to act as an active component for determining presence of fluid temperature.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sillat, Diethard in view of Maric as applied to claim 3 and 4 above and further in view of McCulloch et al., (6,016,697). Sillat, Diethard in view of Maric discloses the invention substantially as claimed as stated above. However, Sillat, Diethard in view of Maric does not disclose light emitting diode. McCulloch et al., teach the use of a light emitting diode (LED) 274, 276, 278 in a fluid sensing system of a cryogenic storage tank 100 through a controller 200 for the purpose of sensing presence of fluid. See Fig.1, 6 and

column 6, lines 47 to column 8, line 8. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the cryogenic fluid distribution system of Sillat, Diethard in view of Maric and further in view of McCulloch et al., such that a light emitting diode could be provided in order to act as an active component for determining presence of fluid.

#### **(10) Response to Argument**

Applicant's arguments filed 04/20/05, 01/03/06 have been fully considered but they are not persuasive. It is also not persuasive to The Examiner that an English language abstract of an IDS provided by the Applicant is not understandable and on the plea for want of the whole translation of the IDS the rejection is traversed. However, the translation is hereby enclosed which will make clear about the supply line and the sensor for the claimed invention. The Applicant argued. "The applicant respectfully contend that a fair and reasonable reading of the translation provided would not lead of ordinary skill in the art to conclude that paths 8 and 10 are fluid flow passages for distrubution of cryogenic fluid as alleged. Action at 3. Indeed, according to Sillat, the presence of fluid within passage 10 results in the closing of check valves 9 and 11. Sillat Trans., page 4, lines 29-33. Such a result will prevent lines 8 and 10 from being used to distribute any cryogenic fluid" The Examiner disagrees. Any fluid line provided with valves does not mean that it is not a fluid supply or distribution line. On the other hand a vapor coming from a cryogenic fluid is also a cryogenic fluid. Again the applicant

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argued, "Similarly, there is no indication in Sillat that any sensor is actually provided in line 10 as alleged. Action at 3. Indeed, the Applicant contend that Sillat's alleged sensor is simply a vessel with a gas, such as neon, that will condense when surrounded by the cryogenic liquid, in this instance LH2, exiting the container 1, thereby reducing the pressure in line 13 to which it is pneumatically connected, with the pressure drop, in turn, being sensed by pneumatic contact manometer P3 at some distance removed from any cryogenic fluid or liquid in line 10." The Examiner again disagrees. The translation page 4, lines 5 and 6 clearly indicate, "The necessary sensor medium, preferably neon in the case of hydrogen storage container, is connected to the vapor pressure contact manometer 12 via line 13. ----- The line 13 is connected to a pneumatic or electric contact manometer P3. ". The examiner also believes that any kind of sensing activity is an active. Regarding other 103 rejections the Examiner believes that the previous rejections are valid and no further explanation is required. Regarding the question of final action, MPEP 706.07(a) does not make any bar for making a second action final on the ground of first action taken on the basis of an abstract. Hence, all previous actions are ok.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

  
Mohammad M. Ali

Conferees:

(1) Cheryl Tyler



(2) Eric Nicholson

